

## ABSTRACT

### **Process for establishing a digital data connection operating via a transmission medium that is subject to disturbance effects.**

The process for establishing a digital data connection between a transmitter and a receiver linked by a transmission medium that is subject to disturbance effects consists of transmitting data which are protected by an error correction code of known effectiveness, while adjusting the signal level that is received by the receiver so that only a limited number of errors are apparent therein, and the transmission level is then increased to ensure that a safety margin (M) is built-in to counter the effect of disturbances upon reception, and:

- a pre-correction error rate measurement point (S1) is determined upon reception,
- depending on the effectiveness of the code with respect to the error rate, the position of an anticipated post-correction error rate curve (C2) is determined in relation to the measurement point (S1),
- an acceptable error rate limit at some point along the curve (C2) is chosen, and,
- starting from the reception level (S2) on the curve (C2) that relates to the error rate limit, the transmission is increased according to the projected safety margin.

Figure 2